

## Summary

The directional coupler (1) in coplanar waveguide technology comprises at least one first directional coupler unit (100) with a first connection (103) for feeding in or guiding out a wave, a second connection (104) for feeding in or guiding out a wave supplied directly from or to the first connection (103), a coupled connection (106) for coupling a fraction of a fed wave at connection (103) and a termination (105). The first connection (103) is connected to the second connection (104) via a first center conductor (107). The coupled connection (106) is connected to the termination (105) via a second center conductor (108). The center conductors (107,108) are bordered on the outside by ground conductors (110,112). The spacing between the center conductor (107) and its adjacent ground conductor (110) and/or between the center conductor (108) and its adjacent ground conductor (112) and the spacing between the two center conductors (107,108) as well as the width of the conductor track of the two center conductors (107,108) change along the longitudinal extension of the center conductors (107, 108).

(Figure 3)

**[Key to diagrams]****Figure 2**

Eingang = Input

Koppelpfad = Coupling pathway

Durchgangspfad = Throughput pathway

Isolationspfad = Isolation pathway

**Figure 7**

Gegentaktwelle = Odd-mode

Gleichtaktwelle = Even-mode